

National Aeronautics and
Space Administration



EXPLORE SOLAR SYSTEM & BEYOND

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PAC Meeting
June 21, 2022

ROSES-21 is complete

Programs with Due Dates

- Average time to notification: 128 days
 - 96% of notifications within 180 days
- Overall selection rate: 20% across all programs with due dates

NoDD Programs

- Average time to notification: 162 days
 - 50% of notifications within ~140 days
 - 90% of notifications within ~235 days
 - Target is 80% in ~180 days
 - Currently, 80% is at ~200 days; getting closer!
- Overall selection rate: 29% across all programs with no due dates

Planetary Science Division ROSES 21 Program	Step-1 Due Date	Step-2 Due Date	Panels Held	Selections/ Proposals	Selection Dates	Days from Step-2 to Select
Planetary Protection Research	04/12/2021	05/13/2021	Yes	5/10 (50%)	10/15/2021	155
Exoplanets Research Program	04/02/2021	05/27/2021	Yes	22/183 (12%)	10/6/2021	132
Development and Advancement of Lunar Instrumentation	04/16/2021	06/16/2021	Yes	5/44 (11%0	1/21/2022	219
Yearly Opportunities for Research in Planetary Defense	04/22/2021	06/17/2021	Yes	12/23 (52%)	10/19/2021	124
Cassini Data Analysis Program ¹	05/07/2021	07/09/2021	Yes	15/38 (39%)	10/8/2021	92
Hot Operating Temperature Technology	06/01/2021	08/03/2021	Yes	7/38 (18%)	11/12/2021	101
Juno Participating Scientist Program	06/14/2021	08/13/2021	Yes	10/27 (37%)	11/12/2021	91
VIPER Mission Co-Investigator Program	07/02/2021	08/31/2021	Yes	8/50 (16%)	12/21/2021	112
Planetary Science and Technology Through Analog Research	07/23/2021	10/07/2021	Yes	6/49 (12%)	3/30/22	175
New Frontiers Data Analysis Program ¹	09/03/2021	11/04/2021	Yes	7/21 (33%)	1/24/2022	81
Mars Science Laboratory Participating Scientist Program ¹	09/15/2021	11/05/2021	Yes	25/50 (50%)	1/21/2022	77
Mars Data Analysis ¹	09/24/2021	11/18/2021	Yes	20/66 (30%)	5/10/2022	173
Discovery Data Analysis ¹	09/28/2021	11/23/2021	Yes	9/31 (29%)	3/26/2022	107
Planetary Science Early Career Award	N/A	12/08/2021	Yes	5/27 (19%)	4/17/2022	130
Payloads and Research Investigations on the Surface of the Moon		12/20/2021	Yes	2/29 (7%)	6/7/2022	169
Lunar Data Analysis ¹	12/01/2021	02/24/2022	Yes	7/35 (20%)	6/16/2022	112
Martian Moons eXploration Participating Scientist Program	MOVING TO ROSES-22					
Future Investigators in NASA Earth and Space Science and Technology	N/A	02/11/2022	Yes	32/230 (14%)	6/15/2022	124
OSIRIS-REx Sample Analysis Participating Scientist Program		04/26/2022	Yes	8/58 (17%)	8/1/2022	97

1: DAPR Program

Highlighted in Yellow = Cross-Divisional
 Not solicited this year: MatISSE, ICAR, Habitable Worlds

NoDD programs

We will be reporting NoDD statistics, in general, for the past year.

	Program	Total ROSES21-22	Within the Last year					Selection Rate	Proposals 5-12 months old			#props in 270 days prior to 10/1/22	# of these notified	50% notification time as of 10/1/22	80% notification time as of 10/1/22
			Submitted	Pending	Declined	Selected	Selectable		# Props	Still pending	Older than 12 months				
C.2	EW	53	33	6	17	10	0	30%	26	2	0	26	24	127	149
C.3	SSW	117	94	21	46	24	3	26%	75	7	0	73	61	184	274
C.4	PDAR	62	38	10	24	4	0	11%	30	2	3	31	26	133	186
C.5	EXO	89	56	15	24	15	2	27%	41	2	0	36	30	130	188
C.6	SSO	27	19	8	7	4	0	21%	15	4	0	15	9	148	Not achieved
C.12	PICASSO	25	16	2	8	6	0	38%	14	0	0	13	12	157	193
C.16	LARS	16	8	4	2	2	0	25%	6	2	0	7	4	117	Not achieved

Notes:

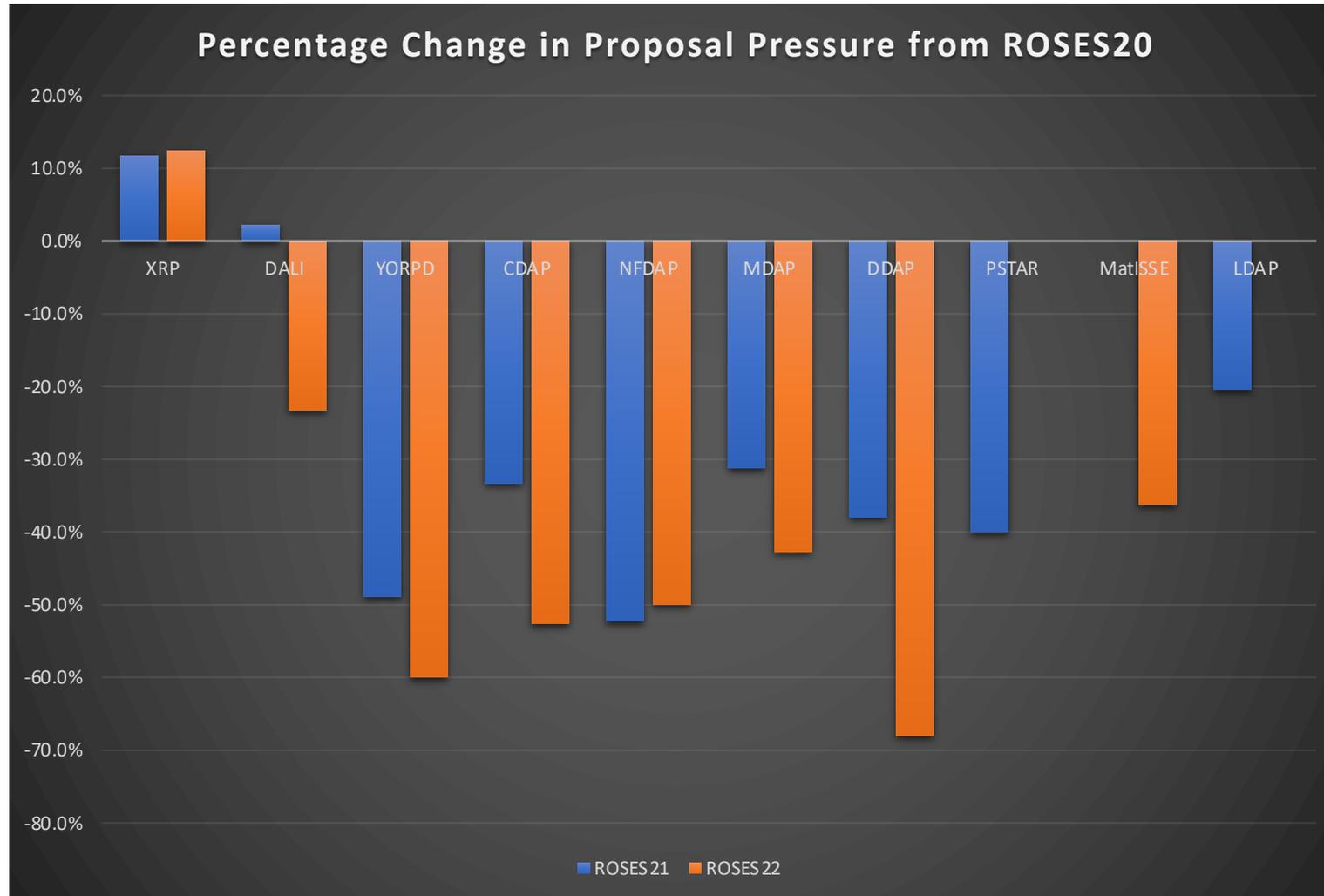
Selection rates have improved!

Proposals are still meeting high standards.

It is taking us too long to get proposals reviewed and notified

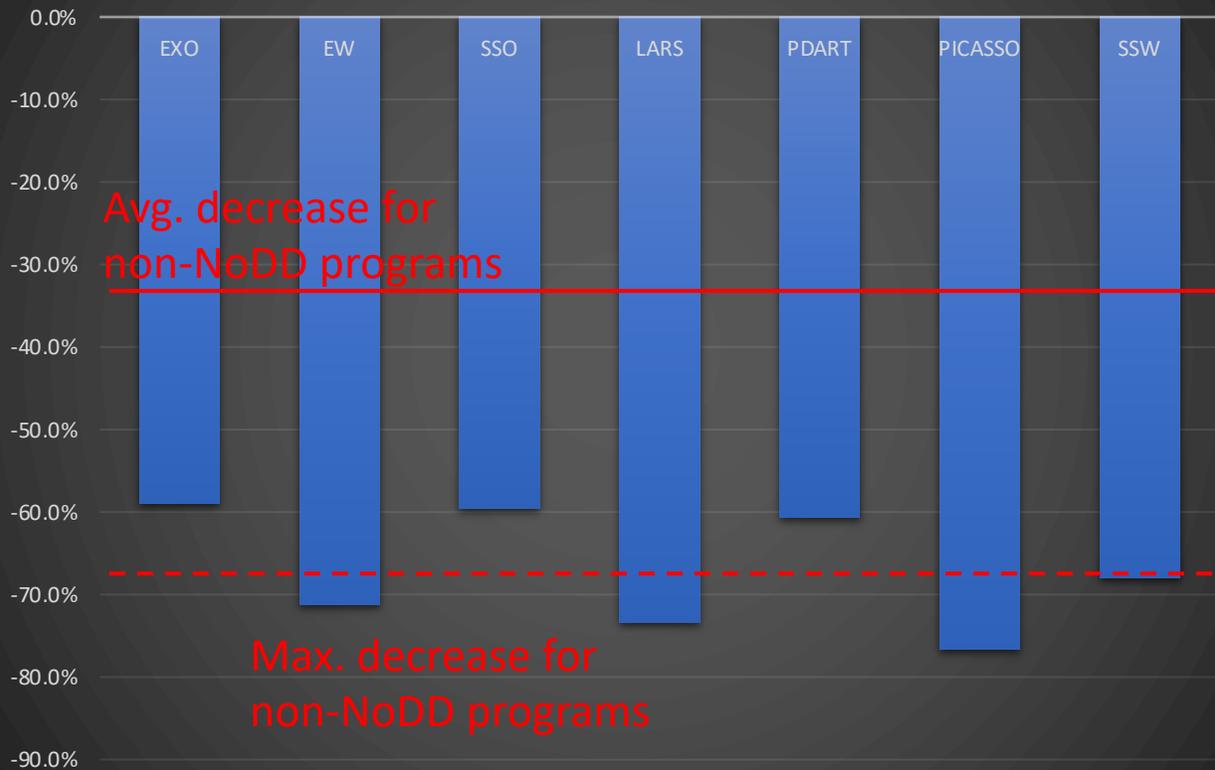
But we're getting better!

Proposal Pressure: Due Date Programs

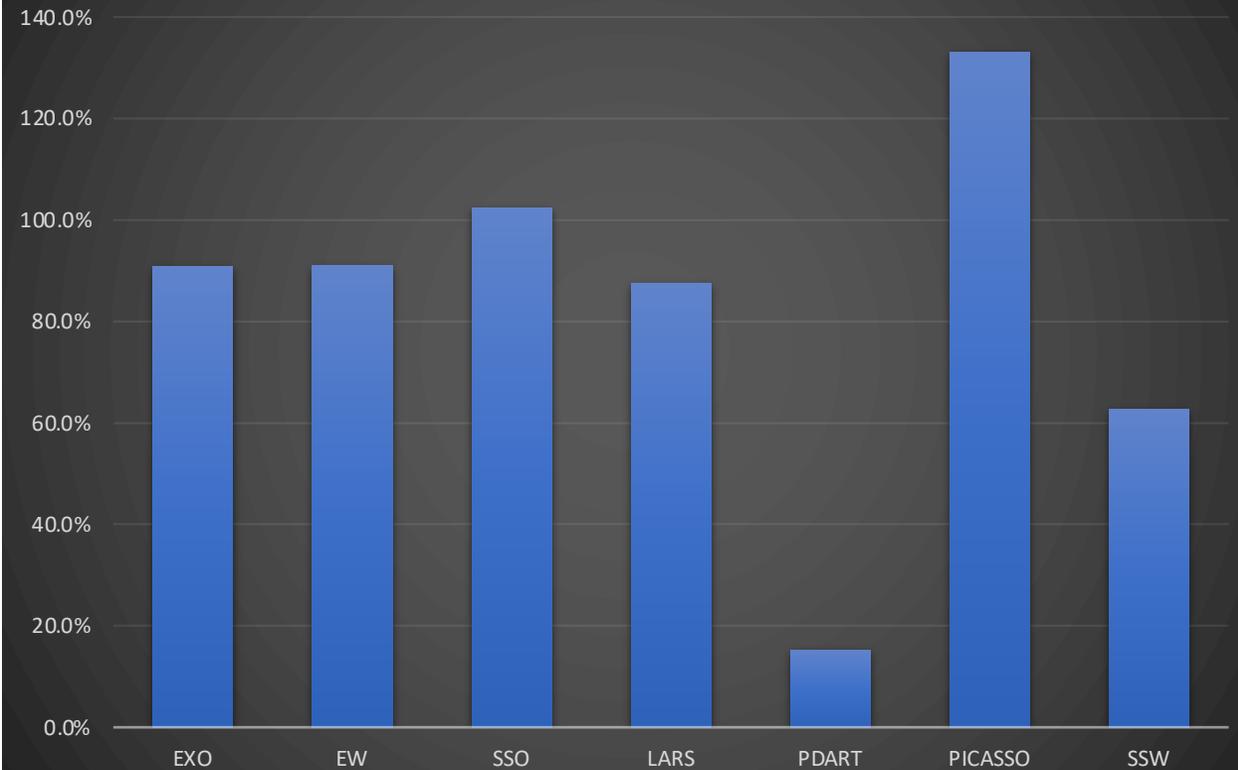


Proposal Pressure in NoDD (ROSES21)

Proposal Pressure for NoDD Programs

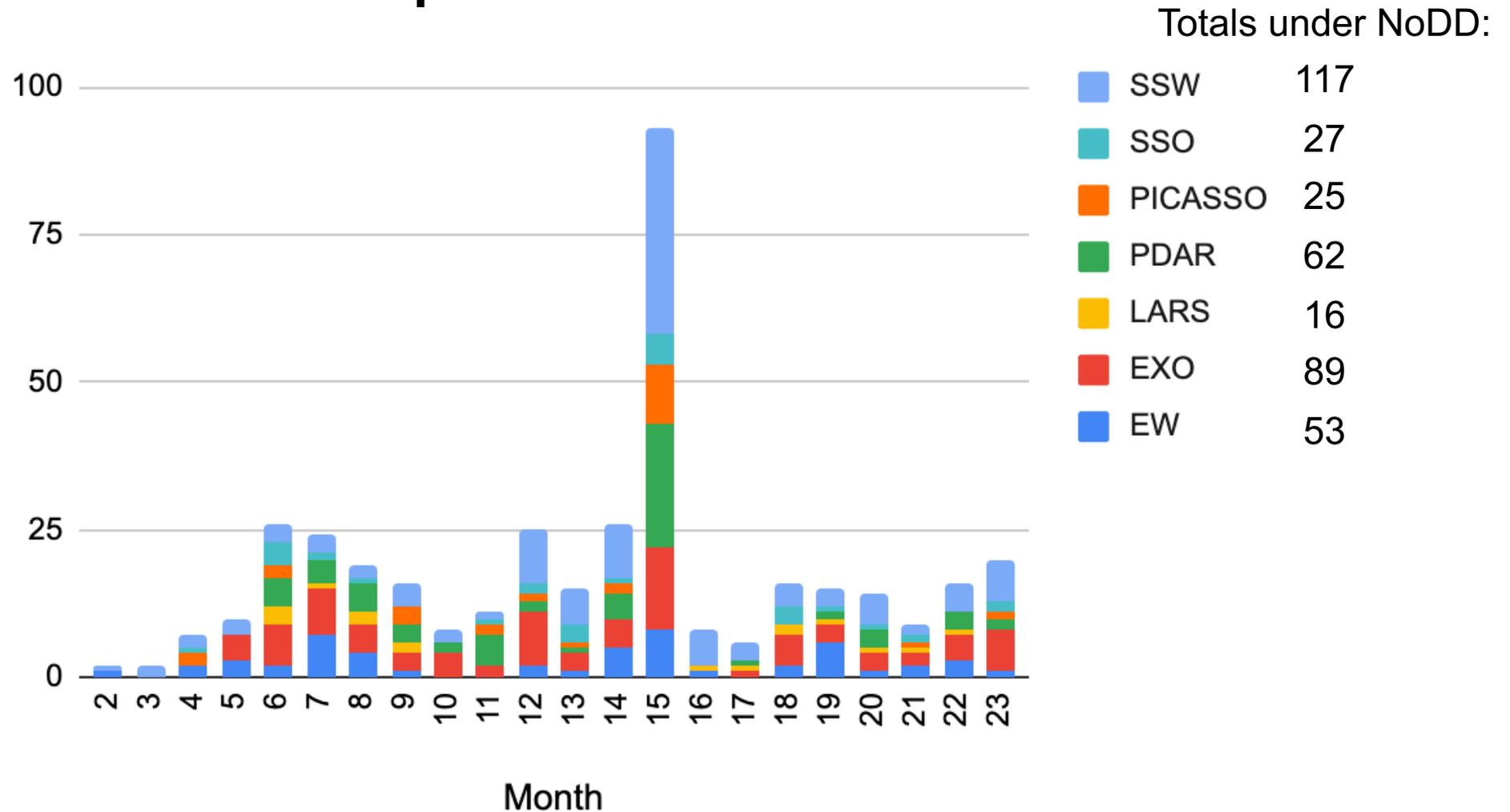


Relative Selection Rates for NoDD Programs



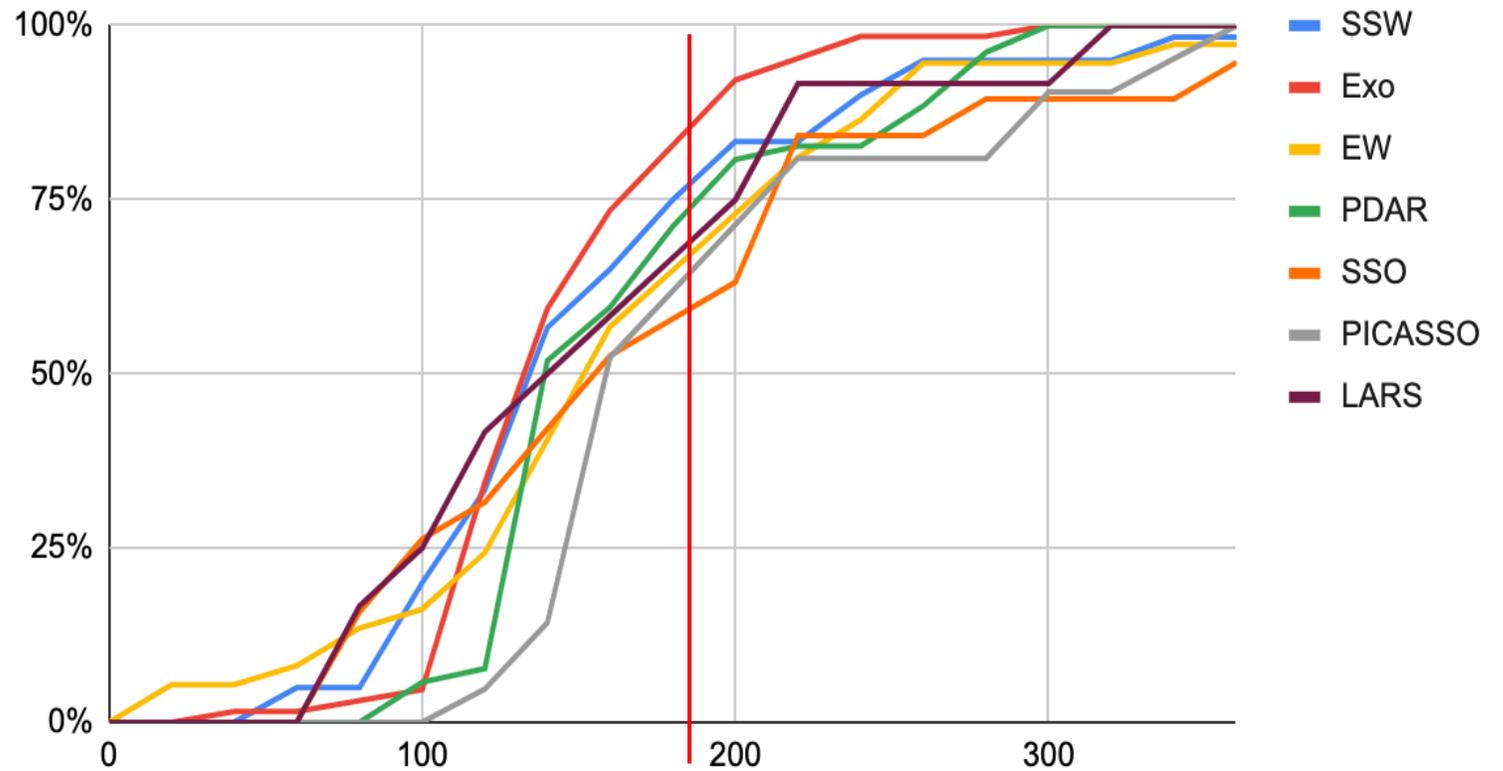
This is the **change** in selection rates relative to ROSES20.

NoDD Proposal Submissions

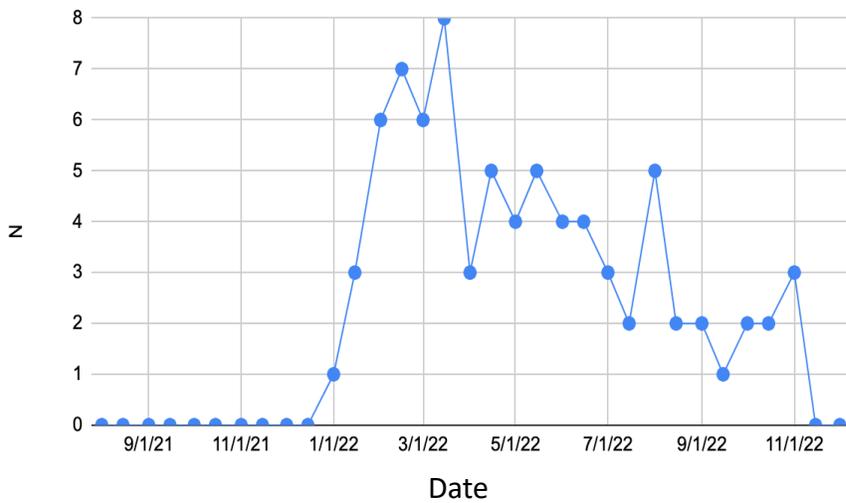


NoDD Time to Notification

Percent notified by (days)



Number of proposals pending >270 days



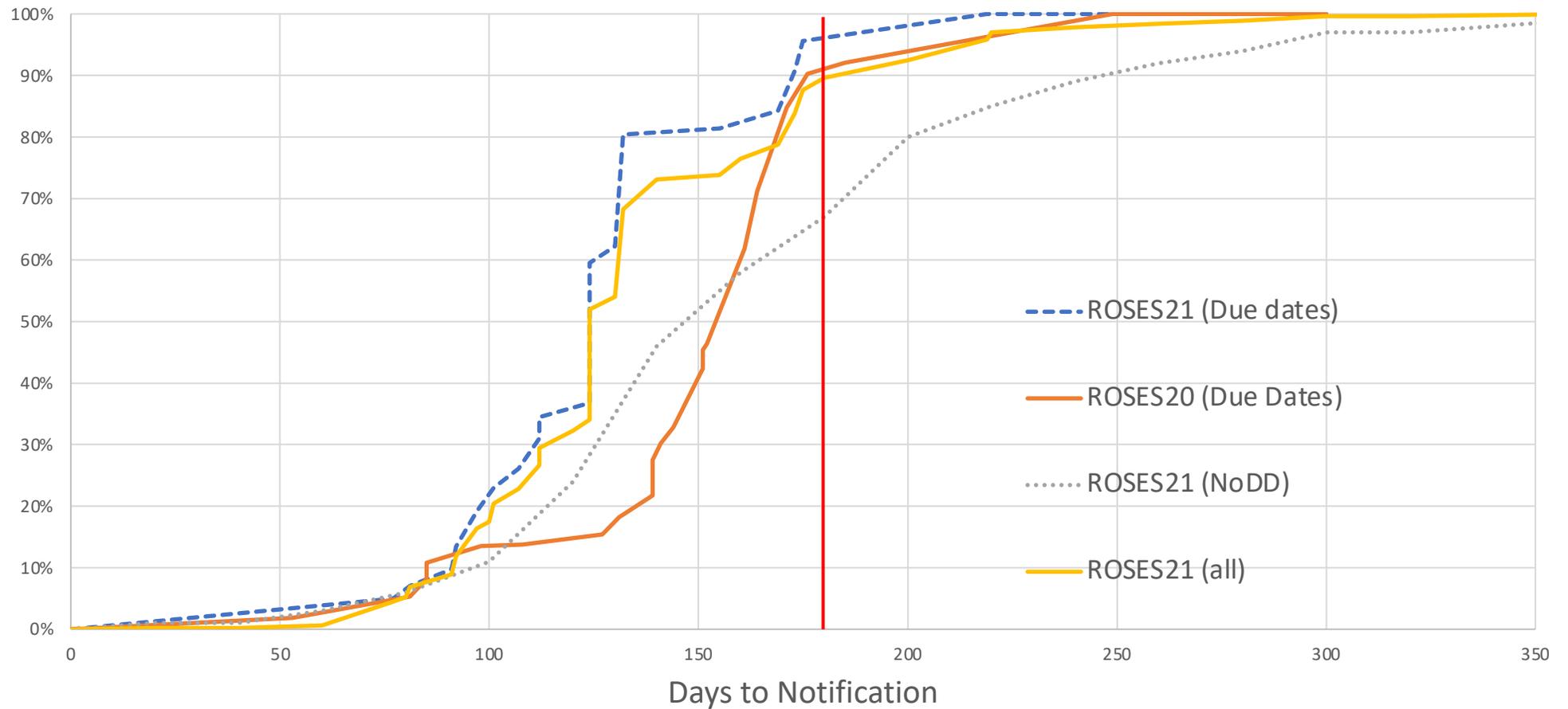
Beginning: some proposals languished while we waited for additional proposals

Now: Time to notification is improving.

Original Goals: 50% of PIs notified in <150 days (at 152 days now); 90% in <235 days (at 278 days now).

New target: 80% within 180 days

Time to Notification: pre-NoDD and now



NoDD: Informal Feedback after 1 year

Community Feedback:

The majority of feedback from the community has been very positive

Program Officer Feedback:

NoDD is more work

Reminder: We decided to do a three-year trial of NoDD, and we knew that the first year would be the toughest as everything transitions.

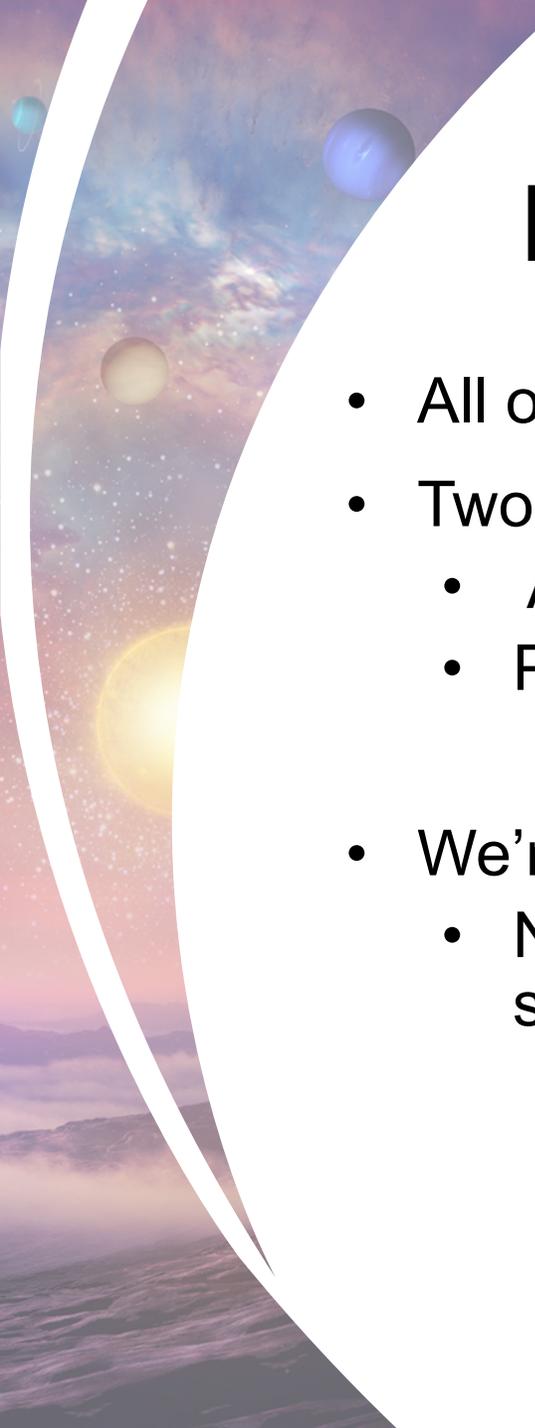
Concerns:

Low proposal pressure (but this is true for all programs)

Time to notification

Reminders on ROSES 22

- No Due Date (NoDD) programs (open now!)
 - <https://science.nasa.gov/researchers/NoDD>
- Remember rules on duplicate proposals (see C.1)
- Compliance: We are checking and strictly enforcing compliance rules. Non-compliant proposals may be returned without review or be declined on this basis *regardless of intrinsic merit score from the panel*.
 - Please remember, compliance rules exist in part to ensure readability and accessibility.

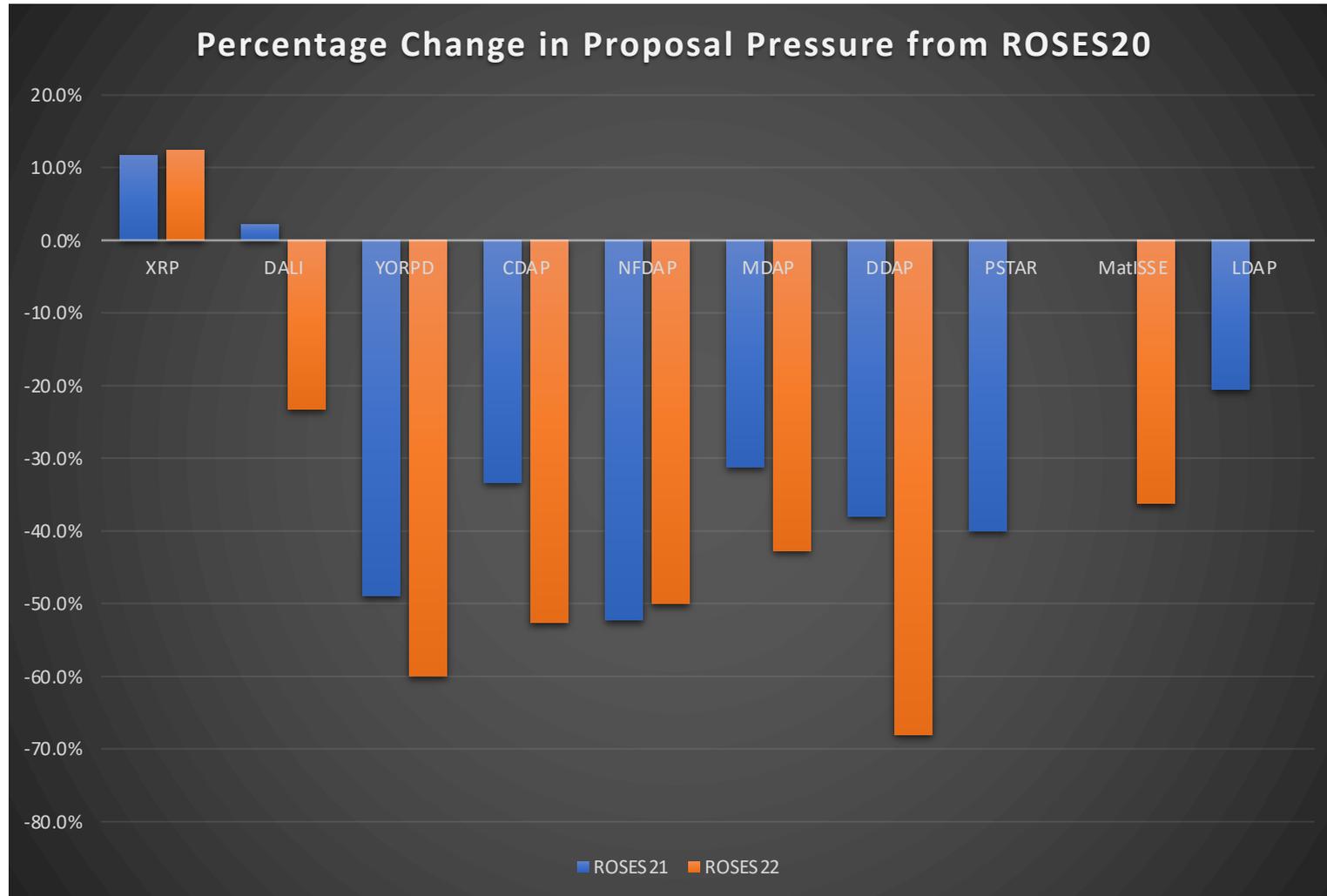


ROSES22: No more news

- All of the Step-1 due dates have now passed
- Two programs with no Step-1 have Step-2 due dates coming soon
 - Analog Activities to Support Artemis Lunar Operations (Today, Dec. 6)
 - Planetary Science Early Career Award (Thursday, Dec. 8)
- We're actively working on ROSES23 solicitations – stay tuned for details
 - Not adopting inclusion plans at this time (more info coming in a few slides)

Planetary Science Division ROSES 22 Programs	Step-1 Due Date	Step-2 Due Date	Panels Held	Selections/Proposals	Selection Dates	Days from Step-2 to Select
Exoplanets Research Program	03/31/2022	05/26/2022	Yes	30/173 (17%)	08/30/2022	96
Maturation of Instruments for Solar System Exploration	04/06/2022	07/14/2022	Yes	5/37 (14%)	10/20/22	98
Planetary Science Enabling Facilities	04/08/2022	06/03/2022	Yes	10/25 (40%)	10/31/22	150
Development and Advancement of Lunar Instrumentation	04/13/2022	06/15/2022	Yes	XX/33		
Yearly Opportunities for Research in Planetary Defense	04/21/2022	06/16/2022	Yes	8/17 (47%)	12/2/22	169
Cassini Data Analysis Program ¹	05/05/2022	07/07/2022	Yes	8/27 (30%)	09/26/2022	81
Martian Moons eXploration Participating Scientist Program	06/16/2022	08/16/2022	No	XX/49		
Planetary Protection Research	06/21/2022	07/20/2022	Yes	XX/15		
Discovery Data Analysis ¹	09/06/2022	11/01/2022	No	XX/16		
New Frontiers Data Analysis Program ¹	09/07/22	11/3/2022	No	XX/22		
Mars Data Analysis ¹	09/07/2022	11/15/2022	No	XX/55		
Analog Activities to Support Artemis Lunar Operations	N/A	12/06/2022				
Planetary Science Early Career Award	N/A	12/08/2022				
Apollo Next Generation Sample Analysis Program	10/17/2022	01/19/2023				
Precursor Science Investigations for Europa	11/01/2022	12/16/2022				
Interdisciplinary Consortia for Astrobiology Research	09/15/2022	01/20/2023				
Habitable Worlds ¹	11/08/2022	02/03/2023				
Lunar Data Analysis ¹	12/1/2022	02/23/2023				
Artemis III Geology Team	TBD	TBD	Highlighted in Yellow = Cross-Divisional Not solicited in ROSES22: PSTAR			
Concepts for Ocean Worlds Life Detection Technology	TBD	TBD				
Future Investigators in NASA Earth and Space Science and Technology	TBD	TBD				

Proposal Pressure: Due Date Programs



With the exceptions of XRP and NFDAP, proposal pressure is down relative to ROSES21 in all programs.

The trend (?) continues.

Inclusion Plans

- NASA introduced inclusion plans last year; the Astrophysics Division did a pilot and ESSIO followed up with their own version.
- Concerns about the early trials of the inclusion plans are being addressed by a SMD Community of Practice, and a more complete plan for inclusion plans is coming together. PSD will likely start adopting inclusion plans as part of ROSES24 (not ROSES23)
- The goal of inclusion plans is to address inclusion **within teams**. These are not intended to be outreach plans or to address larger issues
 - Focus is on barriers to inclusion for team members, activities to address/mitigate those barriers, and metrics to assess success
- Reviewed by separate panel of IDEA experts, social scientists
- Unsatisfactory Inclusion Plans (IPs) will not affect selection (at first)
- SMD is working on compiling and creating resources for proposers writing IPs, will be posted at this site: <https://science.nasa.gov/researchers/inclusion>



IDEACon

- IDEACon was held 25-29 April, 2022, sponsored by LPI and NASA
- At the last PAC meeting, the PAC requested NASA response to the recommendations from IDEACon
 - There is a lot to digest from the workshop and giving complete, thoughtful answers to everything in the report will take time. But we can provide some reflections on those recommendations.

IDEACon: Recommendations

Recommendation A.1: Create an outward-facing position within the NASA Science Mission Directorate (SMD) to advance and implement IDEA principles within NASA.

Recommendation A.2.1: NASA should consider team diversity when selecting and extending missions, projects, facilities, and other large teams.

Recommendation A.2.2: In order to retain that diversity, project teams must also implement policies for creating inclusive and safe environments, including but not limited to codes of conduct and bystander intervention training.

Recommendation A.3: NASA should fund members of the community for their IDEA service work within planetary science and astrobiology.

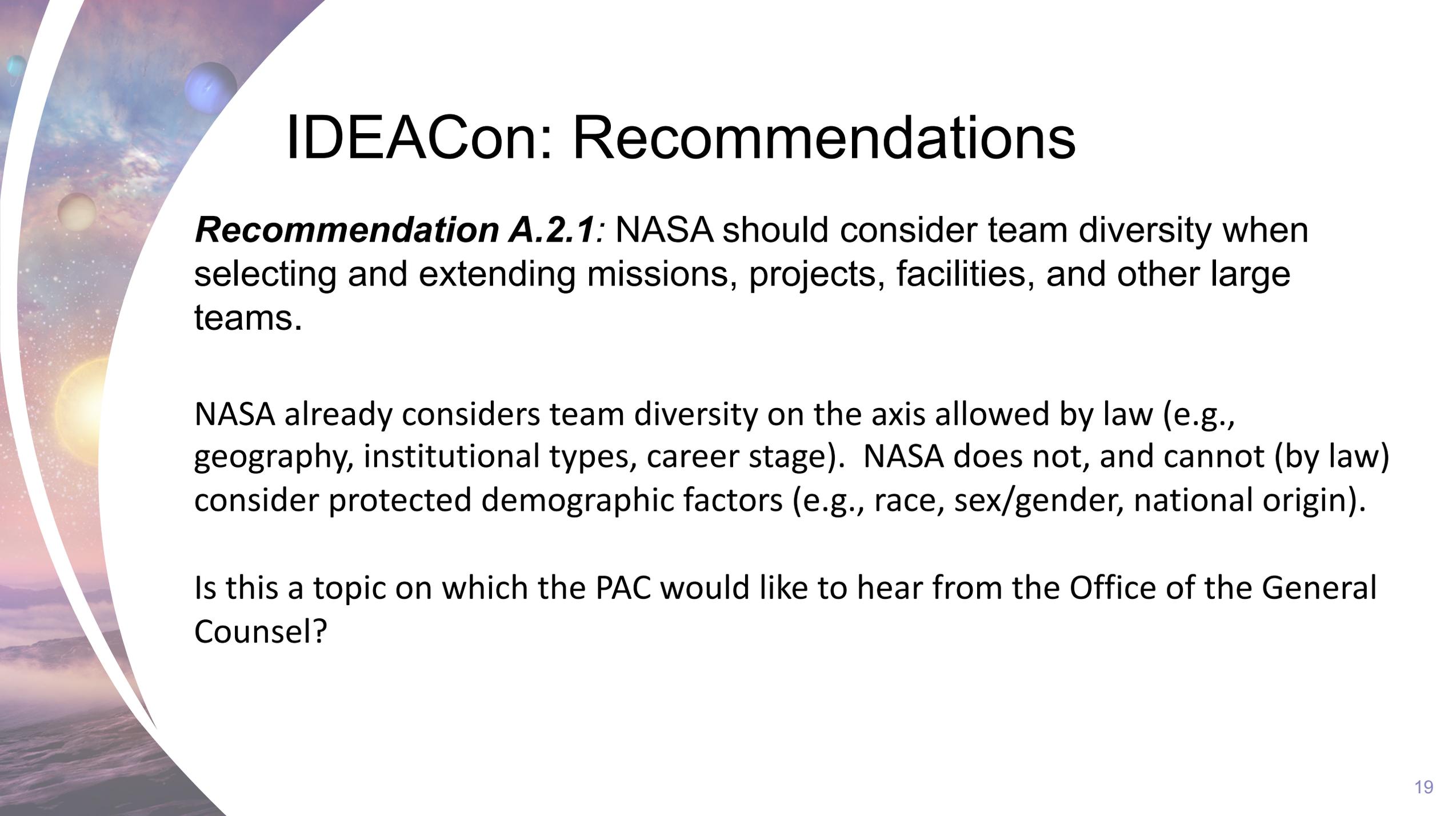
Recommendation A.4: The community and NASA should define professional ethics more broadly than only financial conflict of interest and, in particular, should treat harassment the same way as any other type of research misconduct.

IDEACon: Reflections

Recommendation A.1: Create an outward-facing position within the NASA Science Mission Directorate (SMD) to advance and implement IDEA principles within NASA.

PSD agrees that a position like this could have immense value, provided that the individual has both authority and resources to implement change. PSD is prepared to advocate for such a position, but as the recommendation states, this position should be at the SMD level. This requires a much broader buy-in across the directorate.

SMD is developing the NASA Bridge Program, designed to help develop access points for underrepresented groups.



IDEACon: Recommendations

Recommendation A.2.1: NASA should consider team diversity when selecting and extending missions, projects, facilities, and other large teams.

NASA already considers team diversity on the axis allowed by law (e.g., geography, institutional types, career stage). NASA does not, and cannot (by law) consider protected demographic factors (e.g., race, sex/gender, national origin).

Is this a topic on which the PAC would like to hear from the Office of the General Counsel?

IDEACon: Recommendations

Recommendation A.2.2: In order to retain that diversity, project teams must also implement policies for creating inclusive and safe environments, including but not limited to codes of conduct and bystander intervention training.

Over the past several years, mission teams have voluntarily starting incorporating Codes of Conduct into their “rules of the road.” PSD considers this a best practice and encourages all teams to adopt it. An SMD IDEA Working Group is developing a CoC template for mission teams and flight projects, as a step towards having a CoC for all missions.

Codes of Conduct are being implemented for all field campaigns and for conferences/workshops.

See the NASA response to the Decadal Survey recommendation 16-7.

IDEACon: Recommendations

Recommendation A.3: NASA should fund members of the community for their IDEA service work within planetary science and astrobiology.

This recommendation is rather complicated, in that the wide range of service activity does not lend itself to a single solution. PSD is considering several approaches to address some of these areas, within “the restrictions faced by NASA as a funding agency to support such work”¹. A couple of specific thoughts:

- Many of the suggested activities could be supported institutionally with funding provided through overheads. *NASA cannot “fix” IDEA without the active contributions of institutions!*
- As inclusion plans are implemented, funding could be associated with those efforts to support some activities.
- We are working to build relationships with underrepresented communities. You can help by seeking out new collaborations: <https://msiexchange.nasa.gov>

IDEACon: Recommendations

Recommendation A.4: The community and NASA should define professional ethics more broadly than only financial conflict of interest and, in particular, should treat harassment the same way as any other type of research misconduct.

PSD agrees that harassment of all types is detrimental to the advancement of science, to developing a more diverse scientific culture, and to the principles for which NASA stands.

- NASA now requires disclosure of institutional harassment findings, and those findings can have impacts on current and future funding for harassers.
- Harassment can be reported to NASA:
 - <https://missionstem.nasa.gov/filing-a-complaint.html>
 - However, NASA authority to investigate such claims is very limited

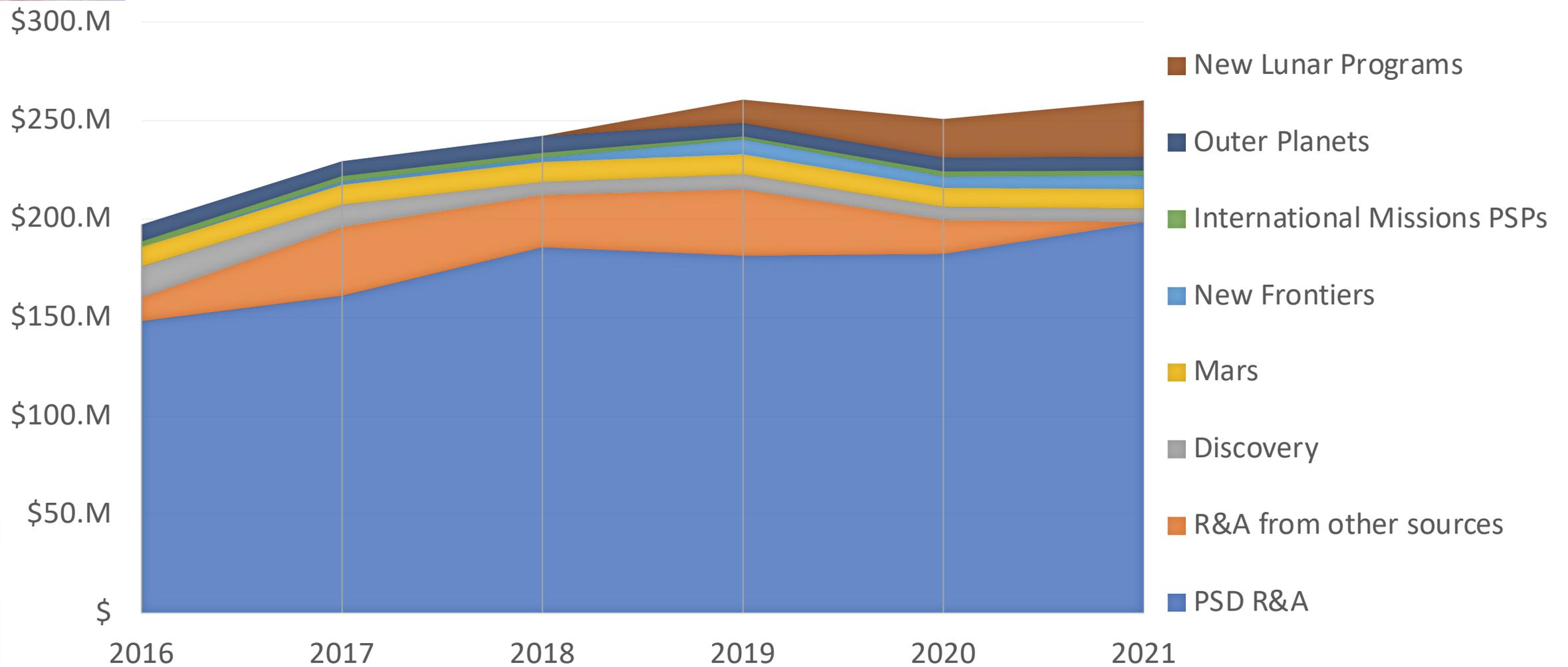
Some notes on IDEA in PSD R&A

Within the R&A Group, our approach (in general) is:

- Improve ourselves; training and education are not by themselves a solution, but a HQ workforce more cognizant of IDEA issues is better able to address them
- Look for places where improvements can get made
 - Who will benefit?
 - Who will pay? (money and time!)
 - Are impacts measurable?
- Focus Actions:
 - The group has limited bandwidth available for new activities
 - Do a few things well, get them established, then move on to the next thing

FY21 Budget

RESEARCH BUDGETS OVER TIME

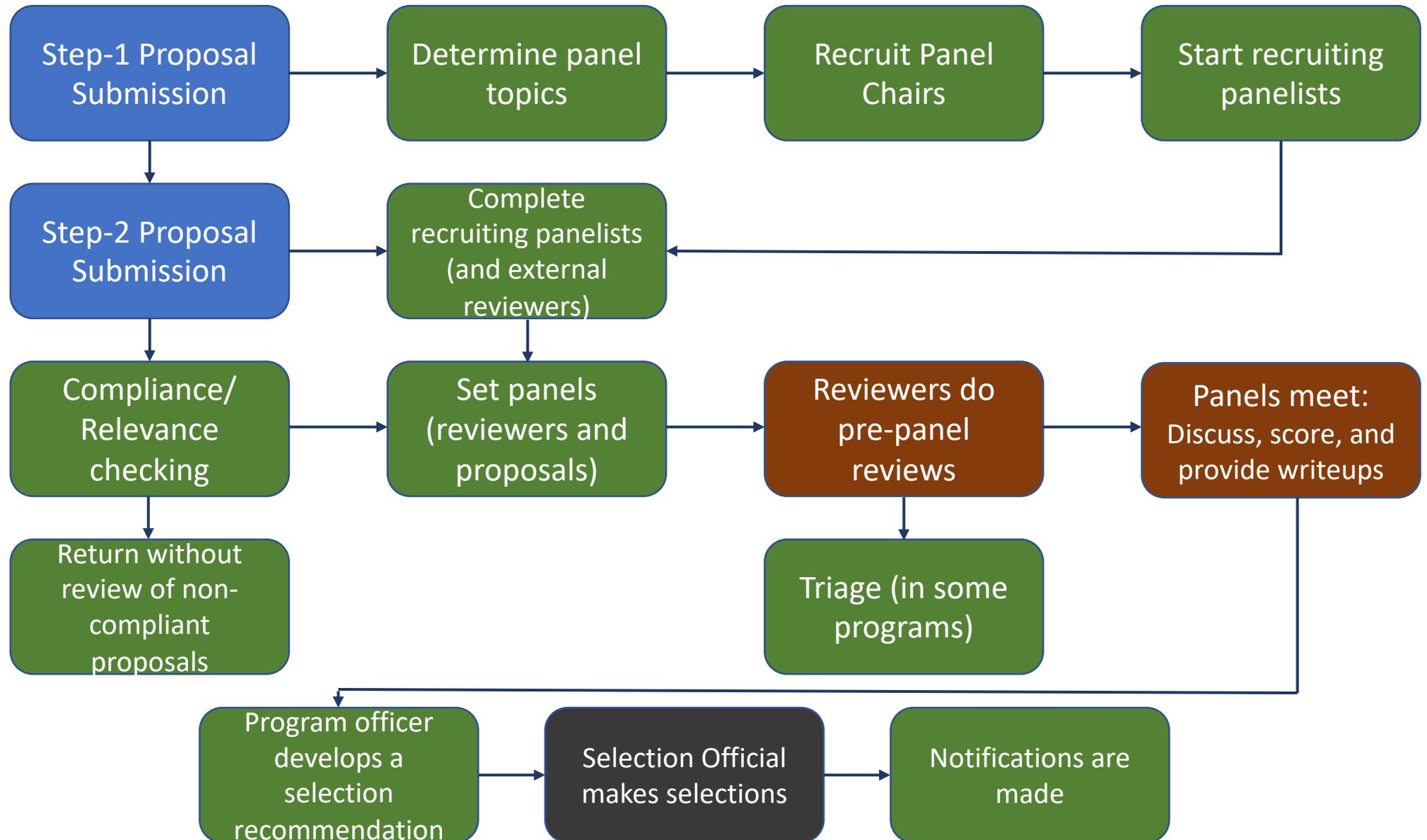




Backup Slides



Review Process



Review Process

The community plays a critical role in this process

